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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/075,058	02/11/2002	Simon Turner	010108	7484

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EXAMINER
NGUYEN, HANH N

ART UNIT	PAPER NUMBER
2616	

DATE MAILED: 12/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	10/075,058	TURNER, SIMON
	Examiner	Art Unit	
	Hanh Nguyen	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>*Amendment filed on 10/2/06*</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-31* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Response to Amendment

The amendment filed on 10/2/06 have been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

Claims 1-3, 5, 6, 8-17, 18, 19-23, 24, 26, 27-29, 30 and 31 are rejected under 35 USC

103(a) as being unpatentable over Vanghi (US Pat. 6,937,861 B2) in view of Huang et al. (US

pat. 6,836,478 B1).

In claims 1, 10, 16 and 31, Vanghi discloses a method of conducting wireless data

communications (see fig.4) comprising receiving a packet data transmission from a first

wireless network (access terminal 14 receives ACK message comprising traffic channel

assignment from radio network 22 , see col.8, lines 8-15); momentarily suspending

communication to the first wireless network (access terminal 14 suspends its connection with the

radio network 22, see col.8, lines 20-25); reconfiguring a receiver from a mode corresponding to

communication with the first wireless network to a mode corresponding to communication with

a second wireless network (suspends its connection with the radio network 22 to perform idle

state processing with radio network 28, see col.8, lines 20-40); monitoring a paging channel of

the second wireless network (col.5, lines 30-40; access terminal 14 periodically monitors paging

channels transmitted from radio network 28 for incoming call, incoming pages); reconfiguring

the receiver from the mode corresponding to communication with the second wireless network to

the mode corresponding to communication with the first wireless network (once completing the

idle state processing with the radio network 28, access terminal 14 returns to its previous

connection to radio network 22, col.8, lines 40-47); and transmitting a resume command to the

first wireless network (access terminal 14 resumes communication with access network 12

which includes radio network 22 using previously assigned resource by radio network 22, see

col.8, lines 44-48; and further transmitting a connection request to radio network in case a timer

has expired; col.9, lines 1-5).

Vanghi does not explicitly disclose transmitting a pause command to the first wireless

network. Huang et al. discloses transmitting a pause command to the first wireless network (see

col.2, lines 4-10; while a call is ongoing, a first request to place the call on hold is transmitted via

an IP telephone network to a CPE, then the CPE temporarily stops sending IP packets response

to receiving the request); transmitting a resume command to the first wireless network (col.2,

lines 10-15 & lines 24-27; a second request is transmitted via the Ip network to remove the call

from hold and resume sending of the Ip packets into the Ip network). Therefore, it would have

been obvious to apply the teachings of Huang et al. into Vanghi in order to switch the call

communication from one network to another; and ensure that the previous call with the first

network is not lost by using the temporary stop feature. The motivation is avoid missing

important calls or priority calls.

In claims 17, 19 and 27, Vanghi substantially discloses most of limitations as disclosed in

the rejection of claim 1 above, In addition, Vanghi discloses the access terminal 14 is configured

with a suspension timer such that the access terminal 14 can keeps track of how long its

connection with radio network 22 was suspended (a timer configured to send an indication at a

time near a start of a paging slot; see col.7, lines 40-50).

In claims 2, 3, 22 and 23, Vanghi discloses, in fig. 1, transmitting a pause command to the

first wireless network includes transmitting a pause command to a packet data serving node (

PDSN 24) via the first wireless network (radio network 22), and wherein transmitting a resume

command to the first wireless network (radio network 22) includes transmitting a resume

command to the packet data serving node (PDSN 24) via the first wireless network; and

receiving packet data transmission from packet data serving node (PDSN 24) via the first

network (radio network 22).

In claim 11, Vanghi discloses the steps of transmitting a resume command to the first

wireless network, wherein said monitoring occurs between said transmitting a pause command

and said transmtting a resume command in claim 1 above.

In claim 6, 8, 9, 12, 13, 14, 15, 20, 21, 28 and 29, Vanghi discloses the pause command

including null data rate as well as the resume comand includes non-null data rate as indicated in

claim 1.

In claims 5, Vanghi does not disclose the pause command includes a command to

reduce a data rate. Huang et al. discloses that placing the call on hold can significantly reduce the

network bandwidth (see col.2, lines 1-5; pause command reduce data rate). Therefore, it would

have been obvious to one skilled in the art that the request to stop transmiting IP packets if

applied in Vanghi would reduce data rate in the network. The motivation is to save bandwidth

and control congestion in the network.

In claim 24, Vanghi discloses the access terminal is further configured and arranged to receive the packet data transmissions (receiving traffic channel assignment; fig.4, col.8, lines 10-15) from the first wireless network over a traffic channel; and wherein, near a start of the paging slot (at some later point in time), a mode of the access terminal is changed from a mode corresponding to the traffic channel (suspending traffic channel) to a mode corresponding to the paging channel (to monitor for incoming pages). See col.8, lines 20-27 and col.5, lines 35-42. unit is changed from a mode corresponding to the traffic channel to a mode corresponding to the paging channel. Vanghi does not disclose the access terminal comprising a physical layer control unit configured to receive packet and change from traffic channel to paging channel. An office notice is taken that having a control unit in an access terminal is well-known in the art to control operation of access unit. Therefore, it would have been obvious to comprise a physical layer control unit in an access terminal of Vanghi to receive packet transmission and change from traffic channel to paging channel. The motivation is to provide access terminal capability of receiving incoming communications from one wireless network even while it is active on another wireless network.

In claim 26, as disclosed by Vanghi in claim 24 above, when when the access terminal 14 completes its connection with radio network 28 (paging channnnel), it resumes communications with radio network 22 (traffic channel) by transmitting on reverse link channel (changing from paging channel to traffic channel). See col.5, lines 52-55.

In claims 18 and 30, with the discussion of the parent claims, interrupt request signal has been disclosed by Huang et al. in parents claims 1, 10, 16 and 31.

Claim 4, 7 and 25 are rejected under 35 USC 103(a) as being unpatentable over Vanghi (

Pat. 6,937,861 B2) in view of Huang et al. (US pat. 6,836,478 B1), and further in view of

Rajaniemi et al. (US Pat. 6,487,399 B1).

In claims 4, 7 and 25, Vanghi does not disclose reconfiguring the receiver including

changing a frequency of a RF stage. Rajaniemi et al. discloses a multi-mode, dual band mobile

terminal 10 (fig.2) communicating with a network 32 (first wireless network) at a GSM1900

carrier (a first mode) at 200KHz (a first frequency) and another network 32' (a second

network) at TDMA1900 carrier (a second mode) at 30 KHz (a second frequency). The mobile

station 10 tunes its receiver 16 (fig.1) at 200 KHz, and then converts the frequency to 30 KHZ.

See Abstract. Therefore, it would have been obvious to one ordinary skilled in the art to use the

tuning frequency of Rajaniemi et al. into Vanghi to change the frequency of the access terminal

corresponding from a frequency corresponding to IS-856 mode to a frequency corresponding to

IS 2000 mode. The motivation is to reduce interference between dual networks.

Response to Arguments

Applicant's arguments with respect to claims 1-31 have been considered but are moot in

view of the new ground(s) of rejection.

With respect to claim 1 above, examiner believes that Vanghi discloses transmitting a

resume command to the first network (see col. 8, lines 44-48; access terminal 14 resumes

communication with access network 12 which includes radio network 22 using previously

assigned resource by radio network 22; and further in col.9, lines 1-5, transmitting a connection

request to radio network in case a timer has expired). It is noted that the claim does not required

whether that a timer is applied to transmit a resume command. However, a new cited reference

Huang et al. (Us Pat. 6,836,478 B1) is applied with Vanghi to teach the above missed

limitations.

With respect to claims 4,7 and 25, examiner understands the claimed "changing a

frequency of a radio-frequency stage" as "tuning from a frequency of one network to a frequency

of another network" which described in fig.11 of the drawing in the specification. Examiner

believes that Rajaniemi et al. in combination with Vanghi and Huang et al. discloses a multi-

mode, dual band mobile terminal 10 (fig.2) communicating with a network 32 (first wireless

network) at a GSM1900 carrier (a first mode) at 200KHz (a first frequency) and another

network 32' (a second network) at TDMA1900 carrier (a second mode) at 30 KHz (a second

frequency). The mobile station 10 tunes its receiver 16 (fig.1) at 200 KHz, and then converts

the frequency to 30 KHZ. See Abstract. Therefore, it is believes the combination of these cited

reference teaches changing a frequency of a radio-frequency stage.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

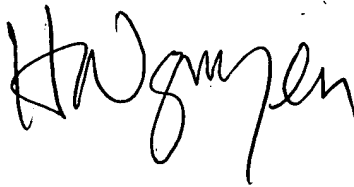Katseff et al. (Us pat. 6,768,722 B1) ;

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Hanh Nguyen whose telephone number is 571 272 3092. The

examiner can normally be reached on Monday-Friday from 8:30 to 4:30. The examiner can also

be reached on alternate

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Ahmad Matar, can be reached on 571 272 7488. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

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system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hanh Nguyen

HANH NGUYEN
PRIMARY EXAMINER